

**REMARKS**

Claims 1-3 are pending.

Claim 3 has been withdrawn from consideration.

The Examiner issued a restriction requirement under 35 U.S.C. § 121 restricting the present application to one of the following inventions:

Group I -- Claims 1-2, drawn to a method for producing a laminated porous polyolefin film, classified in class 156, subclass 308.2.

Group II -- Claim 3, drawn to a laminated porous polyolefin film, classified in class 428, subclass 304.4.

During a telephone conference with Applicants' representative, John Callahan, on December 27, 2005, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-2.

Applicants confirm this election.

Claims 1-2 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over McAmish et al., U.S. Patent No. 6,811,643 ("McAmish") in view of Hutson et al., U.S. Publication No. 2003/0105446 ("Hutson").

Claims 1-2 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over McAmish in view of Hutson and further in view of Takata et al., U.S. Patent No. 6,884,836 ("Takata").

Claims 1-2 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over McAmish in view of Hutson and further in view of Sugimoto et al., U.S. Patent No. 4,472,328.

Applicants respectfully traverse the Examiner's rejections for the following reasons.

Claim 1 is directed to:

A method for producing a laminated porous polyolefin film, the method comprising steps of:

providing a pair of tools for thermocompression bonding two resin films therebetween, each of the tools having a thermocompressing portion between which and the thermocompressing portion of the other tool two films are piled and compressed to bond together,

laminating two films each comprising at least one layer made of a polyolefin resin composition comprising 100 parts by weight of a polyolefin resin having a melt index of 0.1 g/10 min or less and 80 to 300 parts by weight of a filler to form a laminated film by piling and thermocompression bonding the films between the thermocompressing portions of the tools, wherein the surface temperature of each thermocompressing portion is adjusted to a temperature higher than the melting point of the polyolefin resin by from 5 to 25°C during the lamination, and

drawing the laminated film to form micropores therein, thereby yielding a porous film (emphasis added).

In all of the rejections, the Examiner relies on the combination of McAmish and Hutson.

On pages 4-5 of the Office Action, the Examiner asserts that:

In reference to the thermocompression bonding, McAmish et al. is not particular to the rolls 24 and 25 that are used as the bonding tools and does not mention whether their surfaces are heated for thermocompression bonding.

It is commonly known in the art of lamination to use rollers having heated surfaces for thermocompression bonding of an extruded film layer and a preformed film layer, as taught by Hutson et al. Hutson et al. discloses a method for producing porous laminate 10 by bonding an extruded film layer 14 and a preformed film layer 12 using heated rollers 38 (figure 3, paragraph 0026, paragraph 0054). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use heated rollers 24 and 25 for thermocompression bonding, to elevate the

bonding temperature, after having cooled extruded film 26 to prevent draw resonance, for an easier, more uniform bond between the two films 26 and 33. It would also have been within perview of the skilled artisan to use a temperature higher than the melting point of the polyolefin used by 5 to 25°F, depending on the characteristics of the particular materials used for the films 26 and 33, to increase the ease of bonding (emphasis added).

The Examiner is using improper hindsight to conclude that the present invention would be obvious based on McAmish and Hutson. None of the cited references teach “the surface temperature of each thermocompressing portion is adjusted to a temperature higher than the melting point of the polyolefin resin by from 5 to 25°C during the lamination.”

In the method of the present invention, because the film which is subjected to lamination by thermocompression bonding contains a polyolefin resin having a high melt viscosity indicated by an MI of 0.1 g/10 min or less, the surface of the film is not roughened even if it is heated with a tool for thermocompression bonding having a surface temperature adjusted to be higher than the melting point of the polyolefin resin by from 5 to 25°C. Moreover, a high interlayer adhesiveness can be achieved because the thermocompression bonding is carried out at a temperature higher than the melting point of the polyolefin resin by from 5 to 25°C.

Based on the above, it is clear that the tools’ surface temperature of the present invention is related to the melt viscosity of the polyolefin resin included in the resin films to be laminated. It is possible to use the tool’s surface temperature as claimed in the present invention because the two films each have a layer made of a polyolefin resin composition including a polyolefin resin having a high melt viscosity, for instance, a melt index of 0.1 g/10 min or less.

In view of the foregoing, Applicants submit that the present invention would not be obvious over McAmish and Hutson, over McAmish, Hutson, and Tanaka, or over McAmish,

Appln. No.: 10/791,383  
Response under 37 C.F.R. § 1.111

Hutson, and Sugimoto. Reconsideration and withdrawal of each of the rejections is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

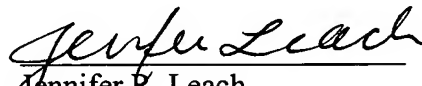
WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: July 7, 2006

Respectfully submitted,

  
Jennifer R. Leach  
Registration No. 54,257